

CLAIMS

Accordingly, I claim

1. An improved water pipe comprising

(A) a smoke and vapor collection chamber comprising

(a) a substantially upright substantially cylindrical chamber body in any of

a plurality of cross-sections, said chamber body having an

innermost and an outermost surface, said chamber body open at a

lowermost extent in such manner as to readily allow entry and

egress of a quantity of water;

(b) a substantially horizontal chamber top having an uppermost and a

lowermost surface, said chamber top so dimensioned as to extend

substantially across said chamber body and rigidly attached thereto

at an uppermost extent thereof in such manner as to form a

substantially airtight seal therewith, said chamber top comprising

(i) a passage extending from said uppermost surface to said

lowermost surface so dimensioned as to allow a

quantity of smoke and vapor to flow readily

therethrough;

(ii) a hole penetrating from said uppermost surface to said

lowermost surface, said hole so positioned as to be

between an outermost extent of said passage and

said innermost surface of said chamber body;

(iii) a portion of an interior of said chamber body within said

innermost surface of said chamber body extending

from said lowermost surface of said chamber top to
said lowermost extent of said chamber body forming a
chamber suitable for the collection and dispensing of
a quantity of smoke and vapor;

said passage and said hole opening from said lowermost surface of
said chamber top into said chamber suitable for the collection and
dispensing of a quantity of smoke and vapor;

- (c) a first means providing an ability to measure a portion of a quantity of
smoke and vapor contained within said chamber suitable for the
collection and dispensing of a quantity of smoke and vapor;
- (d) a tubular hollow stem member demountably inserted through said hole
and forming a substantially airtight seal therewith, extending for a
portion of its length above said uppermost surface of said chamber
top and extending for a portion of its length below said lowermost
surface of said chamber top into a portion of an interior of said
chamber suitable for the collection and dispensing of a quantity of
smoke and vapor, said tubular hollow stem member so
dimensioned and positioned as to have a lowermost extent thereof
between said lowermost surface of said chamber top and said
lowermost extent of said chamber body;
- (e) a demountable second means providing an ability to contain a suitable
quantity of tobacco and to produce a quantity of smoke and vapor
therefrom, rigidly attached to an uppermost extent of said tubular
hollow stem member in such manner as to readily allow a flow of a

portion of said quantity of smoke and vapor from said second means through said tubular hollow stem member, whereby any of a plurality of such suitable second means may be used by an operator for the production of a suitable quantity of smoke and vapor;

(f) a third means providing an ability to alter and adjust a relative vertical positioning of said lowermost extent of said tubular hollow stem member and said lowermost surface of said chamber top, whereby a predetermined quantity of smoke and vapor to be collected may be set by an operator;

(g) a fourth means providing an ability to establish, maintain, and release a substantially airtight seal of said passage and said chamber suitable for the collection and dispensing of a quantity of smoke and vapor,

whereby an operator may establish and maintain said substantially airtight seal of said passage and said chamber suitable for the collection and dispensing of a quantity of smoke and vapor to collect within an interior portion thereof a suitable quantity of smoke and vapor and

whereby an operator may release said substantially airtight seal for dispensing a portion of said quantity of smoke and vapor from a portion of an interior of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor through said passage for inhalation and enjoyment;

(B) a water reservoir comprising

(a) a substantially upright substantially cylindrical reservoir body in any of a plurality of cross-sections, said reservoir body having an innermost and an outermost surface, said reservoir body open at an uppermost extent thereof and so dimensioned as to readily allow installation, removal, and vertical motion of said smoke and vapor collection chamber;

(b) a substantially horizontal reservoir base having an uppermost and a lowermost surface, said reservoir base so dimensioned as to substantially extend across said reservoir body and rigidly attached to a lowermost extent thereof in such manner as to form a substantially watertight seal therewith;

(c) a portion of an interior within said innermost surface of said reservoir body extending from said uppermost surface of said reservoir base to said uppermost extent of said reservoir body forming a chamber within an interior portion thereof may be contained a quantity of water sufficient to substantially fill an interior portion of said smoke and vapor collection chamber when said smoke and vapor collection chamber is suitably installed into said water reservoir;

(C) a fifth means providing an ability to alter and adjust a relative vertical positioning of said water reservoir and said smoke and vapor collection chamber, said smoke and vapor collection chamber being suitably installed into said water reservoir,

whereby said water reservoir being filled with a suitable quantity of water, said suitable quantity of water being sufficient to substantially fill an interior portion of said smoke and vapor collection chamber so suitably installed, said fourth means having established a substantially airtight seal of said passage and said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said fifth means will by raising said smoke and vapor collection chamber relative to said water reservoir produce a hydraulic pressure gradient, also known as head, sufficient to cause a quantity of smoke and vapor to be drawn from said second means through said tubular hollow stem member into a portion of an interior of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, and

whereby said quantity of smoke and vapor will be filtered and cooled by passing through a quantity of water contained within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, and

whereby said quantity of water within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor serves both to draw a quantity of smoke and vapor from said second means through said tubular hollow stem member into an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor due to said hydraulic pressure gradient, and to filter and cool said quantity of smoke and vapor, and

whereby an operator may adjust a relative vertical positioning of said smoke and

vapor collection chamber and said water reservoir so as to control and vary said hydraulic pressure gradient, so controlling and varying a rate at which smoke and vapor may be drawn from said second means through said tubular hollow stem member into said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, so also controlling a rate and temperature of combustion within said second means, and

whereby an operator may adjust a relative vertical positioning of said smoke and vapor collection chamber and said water reservoir so as to ensure that a lowermost extent of said tubular hollow stem member remains always immersed below a surface of a portion of a quantity of water contained within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor during operation, and

whereby said fourth means having released a substantially airtight seal of said passage and said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said lowermost extent of said tubular hollow stem member remaining always immersed below a surface of said quantity of water contained within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said fifth means by lowering said smoke and vapor collection chamber relative to said water reservoir allows a portion of said quantity of smoke in a portion of an interior of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor to be flushed through said passage for inhalation and enjoyment, simultaneously preventing an

undesired outflow of said portion of said quantity of smoke and vapor through said tubular hollow stem member and said second means.

2. An improved hookah comprising the improved water pipe of claim 1 wherein a flexible hose of sufficient interior dimension to readily allow a flow of smoke and vapor therethrough, substantially similar in outermost dimension to an outermost extent of said passage, may be demountably inserted into said passage in such manner as to form a substantially airtight seal therewith,

whereby a quantity of smoke and vapor may be comfortably and conveniently inhaled and enjoyed.

3. An improved water pipe comprising the improved water pipe of claim 1 wherein said chamber top is so positioned as to have an uppermost surface of said chamber top below an uppermost extent of said chamber body, said chamber top so dimensioned as to substantially extend across an innermost surface of said chamber body and rigidly attached thereto in such manner as to form a substantially airtight seal therewith, having a portion of said chamber body extending downwards from said lower surface of said chamber top for a suitable distance and having a portion of said chamber body extending upwards from an uppermost surface of said chamber top for a suitable distance,

whereby spilling of water onto said upper surface of said chamber top may be prevented during operation.

4. An improved hookah comprising the improved water pipe of claim 3 wherein a flexible hose of sufficient interior dimension to readily allow a flow of smoke and vapor therethrough, substantially similar in outermost dimension to an outermost extent

of said passage, may be demountably inserted into said passage in such manner as to form a substantially airtight seal therewith, whereby spilling of water onto said upper surface of said chamber top may be prevented during operation, and whereby a quantity of smoke and vapor may be comfortably and conveniently inhaled and enjoyed.

5. An improved water pipe comprising the improved water pipe of claim 3, wherein said water reservoir comprises in addition a substantially horizontal substantially planar annular reservoir top having an uppermost and a lowermost surface, substantially similar in outermost dimension to said reservoir body, substantially parallel to said reservoir base, located at an uppermost extent of said reservoir body and rigidly attached thereto in such manner as to form a substantially watertight seal therewith, substantially similar in innermost dimension to an outermost dimension of said smoke and vapor collection chamber, of sufficient innermost dimension to readily allow easy installation, removal, and vertical motion of said smoke and vapor collection chamber, simultaneously limiting horizontal motion of said smoke and vapor collection chamber when so suitably installed therewithin,

whereby spilling of water onto said upper surface of said chamber top may be prevented during operation, and

whereby spilling of water from said water reservoir onto a surface upon which said water pipe is placed may be prevented.

6. An improved hookah comprising the improved water pipe of claim 5, wherein a flexible hose of sufficient interior dimension to readily allow a flow of smoke and

vapor therethrough, substantially similar in outermost dimension to an outermost extent of said passage, may be demountably inserted into said passage in such manner as to form a substantially airtight seal therewith, whereby spilling of water onto said upper surface of said chamber top may be prevented during operation, and whereby spilling of water from said water reservoir onto a surface upon which said water pipe is placed may be prevented, and whereby a quantity of smoke and vapor may be comfortably and conveniently inhaled and enjoyed.

7. An improved water pipe comprising

(A) a smoke and vapor collection chamber comprising

- (a) a substantially upright substantially cylindrical chamber body in any of a plurality of cross-sections, said chamber body having an innermost and an outermost surface, said chamber body open at a lowermost extent in such manner as to readily allow entry and egress of a quantity of water;**
- (b) a substantially horizontal chamber top having an uppermost and a lowermost surface, said chamber top so dimensioned as to extend substantially across said chamber body and rigidly attached thereto at an uppermost extent thereof in such manner as to form a substantially airtight seal therewith, said chamber top comprising
 - (i) a first tubular hollow stem member having an innermost and an outermost surface, substantially perpendicular to said uppermost surface of said chamber top,****

having a lowermost extent thereof rigidly attached thereto in such manner as to form a substantially airtight seal therewith, so dimensioned at an uppermost extent thereof as to allow an operator to establish a substantially airtight seal therewith using a thumb;

- (ii) a portion of an interior within said innermost surface of said first tubular hollow stem member forming a passage so dimensioned as to allow a quantity of smoke and vapor to flow readily therethrough, said passage extending from said uppermost extent of said first tubular hollow stem member through said lowermost extent of said first tubular hollow stem member, said uppermost surface of said chamber top, and said lowermost surface of said chamber top;
- (iii) a substantially horizontal planar annulus having an uppermost and a lowermost surface, substantially similar in innermost dimension to said outermost surface of surface of said first tubular hollow stem member and rigidly attached thereto, a portion of a length of said first tubular hollow stem member extending upwards from said uppermost surface of said horizontal planar annulus, a portion of a length of said first tubular hollow stem member extending

- downwards from said lowermost surface of said horizontal planar annulus, said horizontal planar annulus of sufficient outer dimension as to allow an operator a secure grip with fingers placed below said lowermost surface thereof, said horizontal planar annulus so positioned as to allow an operator to form said substantially airtight seal of said uppermost extent of said first tubular hollow stem member using a thumb with fingers so placed below said lowermost surface thereof,
- whereby an operator may establish, maintain, and release a substantially airtight seal of said passage, and
- whereby an operator may alter and adjust a vertical positioning of a smoke and vapor collection chamber during operation;
- (iv) a hole penetrating from said uppermost surface of said chamber top to said lowermost surface of said chamber top, said hole so positioned as to be between said outermost surface of said first tubular hollow stem member and said innermost surface of said chamber body;
- (v) a portion of an interior of said chamber body within said innermost surface of said chamber body extending from said lowermost surface of said chamber top to

said lowermost extent of said chamber body forming a chamber suitable for the collection and dispensing of a quantity of smoke and vapor;

said passage and said hole opening from said lowermost surface of said chamber top into said chamber suitable for the collection and dispensing of a quantity of smoke and vapor;

(c) a first means providing an ability to measure a portion of a quantity of smoke and vapor contained within said chamber suitable for the collection and dispensing of a quantity of smoke and vapor;

(d) a second tubular hollow stem member demountably inserted through said hole and forming a substantially airtight seal therewith, extending for a portion of its length above said uppermost surface of said chamber top and extending for a portion of its length below said lowermost surface of said chamber top into a portion of an interior of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said second tubular hollow stem member so dimensioned and positioned as to have a lowermost extent thereof between said lowermost surface of said chamber top and said lowermost extent of said chamber body;

(e) a demountable second means providing an ability to contain a suitable quantity of tobacco and to produce a quantity of smoke and vapor therefrom, rigidly attached to an uppermost extent of said second tubular hollow stem member in such manner as to readily allow a flow of a portion of said quantity of smoke and vapor from said

and vapor through said passage for inhalation and enjoyment;

(B) a water reservoir comprising

(a) a substantially upright substantially cylindrical reservoir body in any of a plurality of cross-sections, said reservoir body having an innermost and an outermost surface, said reservoir body open at an uppermost extent thereof and so dimensioned as to readily allow installation, removal, and vertical motion of said smoke and vapor collection chamber;

(b) a substantially horizontal reservoir base having an uppermost and a lowermost surface, said reservoir base so dimensioned as to substantially extend across said reservoir body, said uppermost surface of said reservoir base being rigidly attached to a lowermost extent of said reservoir body in such manner as to form a substantially watertight seal therewith;

(c) a portion of an interior within said innermost surface of said reservoir body extending from said uppermost surface of said reservoir base to said uppermost extent of said reservoir body forming a chamber within an interior portion thereof may be contained a quantity of water sufficient to substantially fill an interior portion of said smoke and vapor collection chamber when said smoke and vapor collection chamber is suitably installed into said water reservoir;

(d) a substantially horizontal substantially planar annular reservoir top having an uppermost and a lowermost surface, substantially similar in outermost dimension to said reservoir body, substantially parallel

second means through said second tubular hollow stem member,
whereby any of a plurality of such suitable second means may be used by
an operator for the production of a suitable quantity of smoke and
vapor;

(f) a third means providing an ability to alter and adjust a relative vertical
positioning of said lowermost extent of said second tubular hollow
stem member and said lowermost surface of said chamber top,
whereby a predetermined quantity of smoke and vapor to be collected
may be set by an operator;

(g) a fourth means providing an ability to establish, maintain, and release
a substantially airtight seal of said first tubular hollow stem member,
said passage, and said chamber suitable for the collection and
dispensing of a quantity of smoke and vapor,

whereby an operator may establish and maintain said substantially airtight
seal of said first tubular hollow stem member, said passage, and
said chamber suitable for the collection and dispensing of a
quantity of smoke and vapor to collect within an interior portion
thereof a suitable quantity of smoke and vapor and

whereby an operator may release said substantially airtight seal of said
first tubular hollow stem member, said passage, and said chamber
suitable for the collection and dispensing of a quantity of smoke
and vapor to dispense a portion of said quantity of smoke and
vapor so collected from a portion of an interior of said chamber
suitable for the collection and dispensing of a quantity of smoke

to said reservoir base, located at an uppermost extent of said reservoir body and rigidly attached thereto in such manner as to form a substantially watertight seal therewith, substantially similar in innermost dimension to an outermost dimension of said smoke and vapor collection chamber, of sufficient innermost dimension to readily allow easy installation, removal, and vertical motion of said smoke and vapor collection chamber, simultaneously limiting horizontal motion of said smoke and vapor collection chamber when so suitably installed therewithin,

whereby spilling of water from said water reservoir onto a surface upon which said water pipe is placed may be prevented;

(C) a fifth means providing an ability to alter and adjust a relative vertical positioning of said water reservoir and said smoke and vapor collection chamber, said smoke and vapor collection chamber being suitably installed into said water reservoir,

whereby said water reservoir being filled with a suitable quantity of water, said suitable quantity of water being sufficient to substantially fill an interior portion of said smoke and vapor collection chamber so suitably installed, said fourth means having established a substantially airtight seal of said first tubular hollow stem member, said passage, and said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said fifth means will by raising said smoke and vapor collection chamber relative to said water reservoir produce a hydraulic pressure gradient, also known as head, sufficient to cause a quantity of smoke and

vapor to be drawn from said second means through said second tubular hollow stem member into a portion of an interior of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, and whereby said quantity of smoke and vapor will be filtered and cooled by passing through a quantity of water contained within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, and

whereby said quantity of water within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor serves both to draw a quantity of smoke and vapor from said second means through said second tubular hollow stem member into an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor due to said hydraulic pressure gradient, and to filter and cool said quantity of smoke and vapor, and

whereby an operator may adjust a relative vertical positioning of said smoke and vapor collection chamber and said water reservoir so as to control and vary said hydraulic pressure gradient, so controlling and varying a rate at which smoke and vapor may be drawn from said second means through said second tubular hollow stem member into said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, so also controlling a rate and temperature of combustion within said second means, and

whereby an operator may adjust a relative vertical positioning of said smoke and vapor collection chamber and said water reservoir so as to ensure that a

lowermost extent of said second tubular hollow stem member remains always immersed below a surface of a portion of a quantity of water contained within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor during operation, and

whereby said fourth means having released a substantially airtight seal of said first tubular hollow stem member, said passage, and said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said lowermost extent of said second tubular hollow stem member remaining always immersed below a surface of said quantity of water contained within an interior portion of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor, said fifth means by lowering said smoke and vapor collection chamber relative to said water reservoir allows a portion of said quantity of smoke in a portion of an interior of said chamber suitable for the collection and dispensing of a quantity of smoke and vapor to be flushed through said passage for inhalation and enjoyment, simultaneously preventing an undesired outflow of said portion of said quantity of smoke and vapor through said second tubular hollow stem member and said second means.

8. An improved hookah comprising the improved water pipe of claim 7 wherein a flexible hose of sufficient interior dimension to readily allow a flow of smoke and vapor therethrough, substantially similar in outermost dimension to said innermost surface of said first tubular hollow stem member, may be demountably inserted into said uppermost extent of said first tubular hollow stem member in such

manner as to form a substantially airtight seal therewith,
whereby a quantity of smoke and vapor may be comfortably and conveniently inhaled
and enjoyed.

9. An improved water pipe comprising the improved water pipe of claim 7 wherein said chamber top is so positioned as to have an uppermost surface of said chamber top below an uppermost extent of said chamber body, said chamber top so dimensioned as to substantially extend across an innermost surface of said chamber body and rigidly attached thereto in such manner as to form a substantially airtight seal therewith, having a portion of said chamber body extending downwards from said lower surface of said chamber top for a suitable distance and having a portion of said chamber body extending upwards from an uppermost surface of said chamber top for a suitable distance,
whereby spilling of water onto said upper surface of said chamber top may be prevented during operation.

10. An improved hookah comprising the improved water pipe of claim 9 wherein flexible hose of sufficient interior dimension to readily allow a flow of smoke and vapor therethrough, substantially similar in outermost dimension to said innermost surface of said first tubular hollow stem member, may be demountably inserted into said uppermost extent of said first tubular hollow stem member in such manner as to form a substantially airtight seal therewith,
whereby spilling of water onto said upper surface of said chamber top may be prevented during operation, and
whereby a quantity of smoke and vapor may be comfortably and conveniently inhaled

Patent Application of Paul D. Stuart for "An Improved Tobacco Hookah" continued - 50
and enjoyed.